

REMARKS

Upon entry of the foregoing Amendment, claims 1-27 are pending in the application. Claims 1, 7, 9-20, 22-25, and 27 have been amended. Claim 28 is cancelled without prejudice or disclaimer, and no claims are newly added. Applicants believe that this Amendment does not add new matter. In view of the foregoing Amendment and following Remarks, allowance of all the pending claims is requested.

REJECTION UNDER 35 U.S.C. § 101

The Examiner has rejected claims 1-27 under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Applicants traverse this rejection because the claims produce a "useful, concrete, and tangible result," and are thus directed toward statutory subject matter.

Specifically, claim 1 recites "outputting the at least one modal value," which provides a useful, concrete, and tangible result in that the at least one modal value is made available in a tangible form. Claims 10 and 19 include similar features as recited in claim 1. Accordingly, the rejection is improper and must be withdrawn.

REJECTION UNDER 35 U.S.C. § 112

The Examiner has rejected claims 4-6, 13-15, and 22-24 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Examiner alleges that the term of "substantially identical" is indefinite because the term "substantial" allegedly conflicts with the term "identical" for value comparisons. See Office Action at 2.

Applicants traverse this rejection because the claims do point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants are entitled to use "any style of expression or format of claim which makes clear the boundaries of the subject matter for which protection is sought." MPEP § 2173.01. Moreover, "Examiners . . . should not reject claims or insist on their own preferences if other modes of expression selected by applicants satisfy the statutory requirement."

MPEP § 2173.02 (emphasis added). For at least the reason that a person having ordinary skill in the art would be able to discern the scope of the term “substantially identical,” Applicants request that the Examiner withdraw this rejection of the claims.

REJECTION UNDER 35 U.S.C. § 102

The Examiner has rejected claims 1-3, 10-12, and 19-21 under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent Application Pub. No. 2004/0049570 to Grace et al. (“Grace”). Applicants traverse this rejection because Grace does not disclose each and every feature of the claimed invention.

More particularly, Grace does not disclose at least the feature of “selecting a data subset from a dataset, the data subset comprising . . . at least one non-numeric value,” as recited in claim 1, for example. The Examiner appears to rely upon paragraphs 0049-52 and 0058 as allegedly teaching this feature. However, the cited portions of Grace do not address a data set that includes at least one non-numeric value, as alleged by the Examiner. For example, although paragraphs 0049-52 and 0058 of Grace address gene mapping techniques for determining a nucleotide base sequence, Grace does not disclose determining the nucleotide base sequence from non-numeric data.

Rather, Grace indicates that nucleotide base sequences are determined by analyzing numerical biotechnology data. See Grace at 0064 (“The multi-component information signal includes raw multi-component label fluorescence intensities.”). Grace further discloses that the biotechnology data is normalized, calibrated, adjusted, and otherwise processed using various numerical analysis techniques. For example, Fig. 3a of Grace illustrates that an unfiltered multi-component data signal is a measurement of signal intensity fluorescence at successive points in time. See Grace at 0079. Although the numerical data points represent biotechnology data, the data points are nonetheless purely numeric data.

For at least the reason that the signal processing disclosed by Grace relates to analysis of numerical data, Grace does not disclose at least the feature of “selecting a data subset from a dataset, the data subset comprising . . . at least one non-numeric

value," as recited in claim 1. For at least this reason, Grace fails to disclose all the features of the claimed invention. Accordingly, the rejection is improper and must be withdrawn.

Claims 10 and 19 include features similar to those set forth in claim 1. Claims 2-3, 11-12, and 20-21 and depend from and add features to one of claims 1, 10, and 19. Thus, the rejections of these claims are likewise improper and must be withdrawn for at least the same reasons.

REJECTION UNDER 35 U.S.C. § 103

The Examiner has rejected claims 4-9, 13-18, and 22-27 under 35 U.S.C. § 103 as allegedly being unpatentable over Grace in view of U.S. Patent No. 5,280,547 to Mahoney ("Mahoney"). Applicants traverse this rejection because the Examiner has failed to establish a *prima facie* case of obviousness, for at least the reason that the references relied upon by the Examiner, either alone or in combination with one another, do not teach or suggest all the features of the claimed invention.

More particularly, Grace does not teach or suggest at least the feature of "selecting a data subset from a dataset, the data subset comprising . . . at least one non-numeric value," as discussed above in reference to claim 1. Mahoney fails to make up for the deficiencies of Grace discussed above. For at least this reason, the references relied upon by the Examiner, either alone or in combination with one another, fail to teach or suggest all the features of the claimed invention. Accordingly, the rejection is improper and must be withdrawn.

Claims 10 and 19 include features similar to those set forth in claim 1. Claims 4-9, 13-18, and 22-27 depend from and add features to one of claims 1, 10, and 19. Thus, the rejections of these claims are likewise improper and must be withdrawn for at least the same reasons.

CONCLUSION


Having addressed each of the foregoing rejections, it is respectfully submitted that a full and complete response has been made to the outstanding Office Action and, as such, the application is in condition for allowance. Notice to that effect is respectfully requested.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Date: **September 28, 2006**

Respectfully submitted,

By:



Syed Jafar Ali
Registration No. 58,780

PILLSBURY WINTHROP SHAW PITTMAN LLP
P.O. Box 10500
McLean, Virginia 22102
Main: 703-770-7900
Fax: 703-770-7901